

Appl. No.: 09/966,485
Amdt. dated May 27, 2005
Reply to Office Action of December 28, 2004

REMARKS/ARGUMENTS

In the final Office Action dated December 28, 2004, Claims 1-6 are pending. Claims 1-5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,104,235 to Bronstrup, et al. and U.S. Patent No. 2,845,214 to Finke. In addition, Claims 1-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 3,504,845 to Niemeyer and U.S. Patent No. 1,782,738 to Martin.

Claim 1 is amended as set forth above and includes features previously included in Claims 3-6. Claims 3-6 are cancelled.

Applicant first addresses the rejection of Claim 1 as being unpatentable over Bronstrup, et al. and Finke. In this regard, the features of Claim 6 have substantially been incorporated into Claim 1, and therefore Applicant respectfully submits that the rejections of Claim 1 based on Bronstrup, et al. and Finke are overcome.

In particular, Bronstrup, et al. discloses a package that comprises an internal valve that is located in the bottom of the package and closes automatically under the pressure of the material filled. Bronstrup, et al. does not disclose additional information about the valve, such as the constructive features of the valve. However, it appears that the valve operates only in the filling of the package. That is, the valve placed at the bottom of the package is only operated in the filling stage, and is not used when the package is emptied. Moreover, the valve is not configured for pouring the material contained inside the package. Indeed, this package has also an external pouring device which contains in its upper side a closure or flap (as illustrated in Figure 2). The function of this device (identified in Bronstrup as an "offtake device" 26) is to pour the packed material, and its constructive and functional features are very distinct in comparison with the features of the package recited in Claim 1 of the present application. Therefore, Claim 1, which recites a flow controlling and interrupting valve that comprises an elongate and through-bored body of flexible material, is allowable over Bronstrup, et al.

Finke discloses a package made of a flexible material that comprises a valve in its top. The valve is made by folding sheets of flexible material being fixed with adhesives strips. As a result, a tube that is used in the filling and emptying of the package is provided in the top of the package. The package does not define a grip portion, and therefore, the valve is not positioned

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opposite the body of the package from the grip region as recited in Claim 1. Therefore, Claim 1 is allowable over Finke.

Indeed, Claim 6 was not rejected over Bronstrup, et al., Finke, or their combination. Therefore, Claim 1, which is amended to include the features of previous Claim 6, should also be allowable over Bronstrup, et al. and Finke, individually or in combination.

Applicant now addresses the rejections of Claim 1 as being obvious over Niemeyer and Martin, individually and in combination.

Niemeyer discloses a bag made of a flexible material having a block closure and a grip region. This bag can comprise a valve; however, the reference neither teaches nor suggests a foldable valve as claimed. Therefore, Claim 1 is allowable over Niemeyer, since Claim 1 recites a flow controlling and interrupting valve foldable over itself.

Martin discloses valve bags, made of paper intended for light materials. The valve comprises a tube that is foldable over itself and then tucked with an end flap that is affixed to the bag. In order to avoid leakage, the tube has to be stiff, as disclosed in column 2, lines 61-64, to retain its folded position. Thus, Martin neither teaches nor suggests the features of Claim 1, which recites a flow controlling and interrupting valve that comprises an elongate and through-bored body that is able to close the valve due to the weight of the packed product that crushes both stretches of the tube, thereby contributing to obstruct the passage completely. Thus, Claim 1 is allowable over Martin.

As set forth above, none of the cited references discloses the insertion of a valve, being foldable over the elongate body into the bore, to provide its closure. Further, even in fair combination, the references do not make obvious the claimed invention, as set forth below.

The cited references, alone or in fair combination, do not provide a package that comprises a product-holding body provided with a through-bore and a flow controlling and interrupting valve associated to the through-bore, wherein the valve comprises an elongate and through-bored body of flexible material, the elongate and through-bored body being fixed by means of at least one first end portion thereof to the through-bore, one second end portion of the elongate and through-bored body, being opposed to the first portion, extending outwardly of the through-bore and being foldable over the elongate and through-bored body into the bore, so as to enable one to close the valve. The claimed valve is positioned opposite the product-holding

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body from the grip region. In addition, the second end portion of the elongate and through-bored body is selectively foldable in the direction of the first region inside a cavity. The elongate and through-bored body is fixed to an internal portion of the bore by means of first and second opposed fixation regions, the second region being substantially larger than the first region and the elongate and through-bored body and the internal portion of the bore in the second region is effected substantially over the whole region of contact between them both.

Thus, as set forth in Claim 1, the fixation regions are different in size and, in particular, the second region is substantially larger, and the second end portion of the elongate and through-bored body is "selectively foldable in the direction of the first region inside a cavity defined between the valve and the product-holding body." This feature is not disclosed by the cited references, which instead describe a device that is folded outwardly. Indeed, none of the cited references describes the claimed configuration of the fixation regions, such that a cavity is defined for receiving a valve folded inwardly, i.e., toward the product. Applicant respectfully submits that this distinction, in addition to the other differences, provides a significant improvement over the prior art in establishing a more efficient sealing of the package.

Further, the valve of Claim 1 is configured to remain folded even when subjected only to its own weight. That is, while the end portions of the tube are configured to be crushed by the weight of the product when the package is lifted, the valve is also configured to remain folded even when subjected only to its own weight. Thus, as described in the specification of the present application, the package can be closed when it is completely full of the product and also after some of the product has been poured out. For example, as illustrated in Figure 11, the valve is configured to remain folded, even though the valve has not been crushed by the weight of the package. (Figure 8 illustrates the valve after being crushed.) In this way, the weight of the valve itself helps with the sealing of the package.

In addition to the structural differences between the package of Claim 1 and the devices disclosed in the cited references, Applicant submits that the package of Claim 1 provides distinct advantages over the cited references. For example, the device set forth in Claim 1 needs only one valve for filling and emptying of the package, including the control and interruption of the flow. The possibilities of materials for making the valve of the present invention as well as the kinds of material to be held inside the package are broader when compared to the packages

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disclosed in the prior art documents. This is especially true with regard to the bag of Martin, intended for holding light materials, wherein the material used to make the tube has to be stiff in order to retain its folded position with certainty (column 2, lines 61-64). In this sense, if the material chosen to make the valve or the product hold into the bag are not the adequate, the sealing of the valve would be compromised and a leakage would occur. Further, the valve of the present invention is closed by the user of the package. It can be closed any time, even if the package is not filled up. In this view, this package can be used completely full or partially full. Also, when folded in order to close the valve, the body of the claimed valve seals the bore, thereby avoiding any leakage of the packed material. In addition, since the valve is on the bottom of the package and it is foldable over itself in the direction of the cavity, when the user wants to close the valve it is enough to fold the free stretch over the rest of the length of the tube, which is possible by virtue of the length of this free stretch. To corroborate the tightness, the weight of the packed product crushes both stretches of the tube, thus contributing to obstruct the passage completely. When the user desires to use the product contained in the package, it is enough to unfold the free stretch. The process of opening and closing the valve may be repeated several times, guaranteeing flexible utilization of the package. The probability of the packed material having contact with the environment and of leaking is minimum, due to the construction of the closure of the claimed package. Further, the package of the present invention can be reused.

For the above reasons, Applicant respectfully submits that it would not have been obvious to a person skilled in the art to combine the characteristics of the packages disclosed in the cited references. Moreover, even if fairly combined, the references do not teach or suggest each of the features of the claimed package, which comprises a valve that acts in the filling, in the emptying, and in the closure thereof, including the control and interruption of the flow and the sealing of the package.

For the foregoing reasons, Applicant submits that Claim 1 is allowable over the cited references, as is dependent Claim 2. Accordingly, Applicant respectfully requests entry of the above amendment and withdrawal of the rejections.

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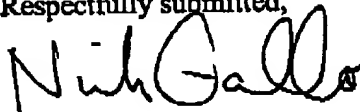
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CONCLUSIONS

In view of the remarks presented above, Applicant submits that the present application is in condition for allowance. As such, the issuance of a Notice of Allowance is therefore respectfully requested. In order to expedite the examination of the present application, the Examiner is encouraged to contact Applicant's undersigned attorney in order to resolve any remaining issues.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefore (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

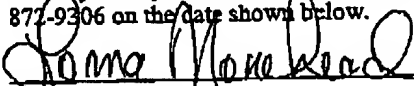


Nicholas F. Gallo
Registration No. 50,165

Customer No. 00826
ALSTON & BIRD LLP
Bank of America Plaza
101 South Tryon Street, Suite 4000
Charlotte, NC 28280-4000
Tel Charlotte Office (704) 444-1000
Fax Charlotte Office (704) 444-1111

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